

***Juncus tiehmii* Ertter**
Tiehm's dwarf rush
Juncaceae (Rush Family)

Status: State Threatened

Rank: G4S1

General Description: Adapted from Hickman (1993): A tiny annual herb (note that most measurements below are in millimeters, due to the extremely small size of the plant) that grows in tufts or small dense clumps and is $\frac{1}{4}$ to $2\frac{1}{4}$ in. (1 to 6 cm) tall. There are up to 150 culms that are 0.1 to 0.2 mm in diameter. The leaves are up to 1 in. ($2\frac{1}{2}$ cm) long and 0.1 to 0.3 mm wide. The inflorescences are in headlike clusters, each with 1 to 7 flowers. There are 2 to 8 ovate, inconspicuous bracts that subtend the inflorescence, and are 0.6 to $1\frac{1}{2}$ mm, membranous, and have come to an acute apex. The flowers are 2-merous. There are 4 to 6 tepals, which are green or darker, acute to acuminate, 2 to 3 mm long and 0.4 to 0.6 mm wide and nearly equal. There are 2 to 3 stamens with filaments that are 0.5 to 0.8 mm and anthers that are 0.3 to 0.4 mm. The style is 0.2 to 0.3 mm and the stigma is 0.2 to 0.7 mm. The capsules are pink-tinged, 2- or 3-locular, ellipsoid to narrowly oblate, 2 to 3 mm long and 1 to $1\frac{1}{2}$ mm wide, and nearly equal or slightly longer than the tepals. The seeds are oblate to ovoid and 0.35 to 0.55 mm.

Identification Tips: *Juncus tiehmii* is most closely related to *Juncus capillaris*. These two species can be distinguished by their capsules. The capsules of *J. tiehmii* are brownish and usually nearly equal to or longer than the perianth. The capsules of *J. capillaris* are usually shorter than the perianth and greenish or tan. The nature of the flowers distinguishes *J. tiehmii* from the other closely related species of *Juncus*. The flowers of *J. tiehmii* are 2-merous. The flowers of other related species of *Juncus* are 3-merous and their capsules are nearly equal to their perianth.

Phenology: Identifiable from mid spring to early fall.

Range: This species is found in California, Idaho, Nevada, Washington, and Mexico. In Washington it is known from Douglas County.

Habitat: *Juncus tiehmii* occurs in bare areas with moist granitic sand along streams, seepage areas around outcrops, and depressions in meadows. This species is commonly found at an elevation of 984 to 10,171 ft (300 to 3100 m). In Washington this species has been found in seepy, moss covered silt at the base of basalt cliffs and in steep,

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Known distribution of
Juncus tiehmii
in Washington



- Current (1980+)
- Historic (older than 1980)

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2003 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program and the U.S.D.I. Bureau of Land Management. Persons needing this information in an alternative format, call (360) 902-1600 or TTY (360) 902-1125.

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moassy, moist benches at an elevation of 1970 to 2010 ft. within shrub-steppe ecosystems. Associated species include navarettia (*Navarettia intertexta*), dense silkybent (*Agrostis interrupta*), basin wildrye (*Elymus cinereus*), chaparral willowherb (*Epilobium minutum*), toad rush (*Juncus bufonius*), Sandberg bluegrass (*Poa secunda*), smooth spike-primrose (*Boisduvalia glabella*), bluecurls (*Trichostemma oblongum*) and Brewer's monkeyflower (*Mimulus breweri*).

Ecology: This species grows in moist areas with silt and clay soils.

State Status Comments: Known from one recent occurrence in Douglas County. This population occurs on privately owned land.

Inventory Needs: Seepage areas in Douglas County should be systematically surveyed for additional populations.

Threats and Management Concerns: Current threats include grazing, development, and recreational activities such as off-road vehicles use.

References:

Flora of North America Editorial Committee, eds. 2000. *Flora of North America North of Mexico, volume 22: Magnoliophyta: Alismatidae, Arecidae, Commelinidae (in part) and Zingiberidae*. New York and Oxford. 352 pp.

Hickman, J.C., ed. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley. 1400 pp.

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